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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/332,486 10/31/94 SERLET

B 10010.929C

PAYNE, M EXAMINER

B3M1/1222

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ART UNIT PAPER NUMBER

2316

12

DATE MAILED: 12/22/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 10/31/94 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☐ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
- ☐ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

- ☒ Claims 1-18 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
- ☐ Claims _____ have been cancelled.
- ☐ Claims _____ are allowed.
- ☒ Claims 1-18 are rejected.
- ☐ Claims _____ are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.
- ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
- ☐ Formal drawings are required in response to this Office action.
- ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
- ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
- ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
- ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
- ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
- ☐ Other

EXAMINER'S ACTION

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1. This office action is filed in response to application, serial number 08/332,486 (Preliminary Amendment D), filed on October 31, 1994.

2. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure. It is unclear how a receiver object determines whether it has been given all the information it needs to execute a message, in order to determine if a query must be generated and sent back to the sender object. On p.22, paragraph 4, the specification cites that the present invention supports this feature, but does not fully disclose it. This rejection goes hand in hand with section (c) of the following 35 U.S.C. § 112, second paragraph rejection. This feature must be fully disclosed.

3. Claims 5-7, 11-18 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the

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specification.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 8-10 are rejected under 35 U.S.C. § 102(a)&(b) as being anticipated by Bennet, "The Design and Implementation of Distributed Smalltalk", OOPSLA '87 Proceedings: Conference on Object Oriented Programming, Systems, Languages, and Applications, pp. 318-330, 12/1987. Bennet teaches all that is claimed.

Bennet clearly teaches the use of a 'ProxyObject' and translation (encoding/decoding) of the message before and after transmission. This is taught in both directions, i.e. sending the message and the result. The translation from a language-based message into an operating system-based message is shown in the use of the **doesNotUnderstand:**, **perform:**, and **remoteSend:** primitives, a 'RemoteObjectTable' which uses a 'messageProcess' to construct a messageArray, and the encoding of an 'argument

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string'. These features clearly indicate a system-dependent form of the message which is transmitted to the receiver object. This system-dependent form is then decoded, the message extracted, and the message executed by the receiver object. The result is then transmitted back to the sender in the same manner.

Claims 3 & 4 do not contribute to making the claimed invention distinct from the prior art. The limitation, in claim 3, that the message comprises a method and an argument, is disclosed by Applicant in the 'BACKGROUND ART' section of the specification, p.1, lines 21-25, and is common in the art. It is also understood in the art that executing a message comprises executing the given method on the given argument, as described in claim 4.

Claims 8-10 do not make the claimed invention distinct from the prior art. Regarding claims 8 & 9, see the above 35 U.S.C. § 112, second paragraph rejection. Regarding claim 10, this limitation is understood in the general understanding of the 'proxy' concept.

6. Applicant's arguments filed October 31, 1994 have been fully considered but they are not deemed to be persuasive.

7. The objection to the drawings has been overcome in response to Applicant's amendments.

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8. The objection to the specification, and the corresponding rejection of claims 5-7, 11-18, under 35 U.S.C. § 112, first paragraph, stands in response to Applicant's amendments. The cited pages of the specification, as well as the portion of the appendix, do not fully disclose nor teach this feature of the invention. Applicants remarks describing the inherent ability of objects to determine if all necessary information is present for execution of a method is not persuasive. It is common to expect that if an object receives an incomplete method call, that it would produce an error message. However, this is far from the described capability of an object to determine whether additional information is needed for execution, to generate a 'query' if more information is needed, and for the sender to have the functionality to understand this 'query' and respond with a 'reply'.

9. The 35 U.S.C. § 112, second paragraph, rejection of claims 1-18 has been overcome in response to Applicant's amendments.

10. The rejection of claims 1-4, 8-10 under 35 U.S.C. § 102(a)&(b) has been revised in response to Applicant's amendments. The rejection over McCullough has been overcome by Applicants amendments. The rejection under section (e) of 35 U.S.C. § 102 was inadvertent, and has been removed. Applicant's arguments appear to be directed primarily to perceived

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differences between the invention and the cited references, rather than to delineating specifically claimed features of the invention which are not taught by the cited references. This rejection is based on the features in the claims, not those in the specification. Applicant's arguments are describing features not in the claims, and as such, are not pertinent. Applicants arguments regarding the number and placement of the ProxyObject are not persuasive. Claim 1 describes the transmission of a message to a first proxy in said first process. Bennet clearly describes ProxyObjects present in each host, this host inherently being a process address space.

11. A shortened statutory period for response to this action is set to expire 3 (three) months, 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will cause the application to become ABANDONED according to 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Payne whose telephone number is (703) 305-9593.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

MMP
mmp

December 21, 1994


KEVIN A. KRIESS
PRIMARY EXAMINER
GROUP 2300